ABSTRACT OF THE DISCLOSURE

A shuttle blow molding machine having two groups of mold units located on opposite sides of a series of workstations spaced along a horizontal workstation path. Each mold unit includes a mold that reciprocates in a direction transverse to the workstation path between a retracted position that is spaced from the workstation path and an extended position aligned with the workstation path. The mold units within each group are located in side-by-side relation adjacent each other and each group is indexed as a single unit along a path parallel to the workstation path. The transverse motion of the molds between their retracted and extended positions allows one group to be retracted out of the way while the other group advances through the workstations. The mold units sequence through repetitive cycles in which the mold units of the first and second groups are indexed in a forward direction through the workstations, and then are moved in a return direction along their respective paths back to their starting position. When moving in the forward direction, the molds are moved from their retracted position toward their extended position prior to entering the first workstation and then are moved back to their retracted position after leaving the last workstation. The mold units of the first group are indexed together sequentially through the stations followed by the mold units of the second group which are indexed together sequentially through the stations while the mold units of the first group return to their starting position.